WE CLAIM:

1. A head stack assembly (HSA) for use in a disk drive comprising a disk, wherein a merge tool is used to merge the HSA with the disk during manufacturing of the disk drive, the HSA comprising:

(a) at least one actuator arm;

(b) a suspension connected to a distal end of the actuator arm;

(c) a head connected to a distal end of the suspension, wherein the suspension for biasing the head toward the disk; and

(d) a multi-level shipping comb attached to the actuator arm, the multi-level shipping comb comprising at least one finger for maintaining the suspension in a near optimal vertical position, wherein:

the finger comprises a first surface and a second surface, wherein the second surface is raised relative to the first surface;

during shipping of the HSA, the first surface of the finger contacts the suspension to protect against overstressing the suspension; and

during manufacture of the disk drive, the shipping comb is actuated so that the second surface contacts the suspension thereby bending the suspension in a vertical direction to facilitate the insertion of the merge tool.

2. The HSA as recited in claim 1, wherein:

(a) the actuator arm comprises an aperture; and

(b) the shipping comb comprises a pin and a latching member, wherein the shipping comb is attached to the actuator arm by:

inserting the pin through the aperture of the actuator arm; and

rotating the shipping comb in a first direction until the latching member latches onto the side of the actuator arm and the first surface of the finger contacts the suspension.

3. The HSA as recited in claim 2, wherein the shipping comb is actuated by rotating the shipping comb so that the second surface contacts the suspension thereby bending the suspension in a vertical direction to facilitate the insertion of the merge tool.

4. The HSA as recited in claim 3, wherein the shipping comb is actuated by rotating the shipping comb in the first direction.

5. The HSA as recited in claim 3, wherein the shipping comb is actuated by rotating the shipping comb in a second direction opposite the first direction.

6. The HSA as recited in claim 1, wherein:
(a) the second surface comprises a beveled surface with respect to the first surface; and
(b) the suspension slides over the beveled surface when the shipping comb is actuated.

7. The HSA as recited in claim 2, wherein after the merge tool is inserted, the shipping comb is detached from the actuator arm by rotating the shipping comb in a second direction opposite the first direction.

8. The HSA as recited in claim 1, wherein after the merge tool is inserted, the shipping comb is detached from the actuator arm causing the suspension to retract vertically and engage the merge tool.

9. The HSA as recited in claim 1, wherein the suspension comprises a coating for contacting the first and second surfaces of the finger to reduce friction between the finger and the suspension.

10. The HSA as recited in claim 1, wherein:
(a) the finger of the shipping comb comprises an arcuate shape such that the first and second surfaces comprise an arcuate shape; and
(b) the second surface comprises a radius larger than a radius of the first surface.

11. A method of manufacturing a disk drive comprising a base casting, a disk, and a head stack assembly (HSA), the HSA comprising at least one actuator arm, a suspension connected to a distal end of the actuator arm, a head connected to a distal end of the suspension, wherein the suspension for biasing the head toward the disk, and a shipping comb attached to the actuator arm for maintaining the suspension in a near optimal vertical position, the method comprising the steps of:

(a) inserting the HSA into the base casting;

(b) actuating the shipping comb to bend the suspension in a vertical direction to facilitate the insertion of a merge tool comprising a finger for engaging the suspension;

(c) inserting the merge tool such that the finger of the merge tool moves into position without scraping against the suspension;

(d) detaching the shipping comb from the actuator arm wherein the suspension retracts vertically and engages the finger of the merge tool; and

(e) actuating the merge tool to merge the HSA with the disk.

12. The method as recited in claim 11, wherein the shipping comb is actuated by rotating the shipping comb to bend the suspension in a vertical direction to facilitate the insertion of the merge tool.

13. The method as recited in claim 11, wherein:

(a) the shipping comb comprises a beveled surface; and

(b) the suspension slides over the beveled surface when the shipping comb is actuated.

14. The method as recited in claim 11, wherein the shipping comb is detached from the actuator arm by rotating the shipping comb.

15. The method as recited in claim 11, wherein the suspension comprises a coating for reducing friction between the shipping comb and the suspension.